

SOUTHWEST AREA

Updated: 4/01/08

Smoke Management Reporting, Supplement to ICS-209

On April 27, 2004, the Southwest Coordinating Group (SWCG) notified all field units via memorandum (Smoke Monitoring via the ICS-209) that additional fuel and smoke dispersion information was required to be reported on the **ICS-209** form for all large Wildland Fires and Wildland Fire Use incidents in the Southwest Area (i.e. Fires >100 acres in Timber and Slash, and >300 acres in grass and brush). This direction was made in order to meet smoke management requirements for the New Mexico Air Quality Bureau and the Arizona Department of Environmental Quality - Air Quality Division.

Because the States of Arizona and New Mexico have different needs, the following guidelines are provided to assist Incident Management Teams (IMT) and individual units in inserting this information on the ICS-209. Reporting guidelines for completion of the ICS-209 are stated in Chapter 20, Section 25, of the SWA Mobilization Guide.

NEW MEXICO

For **ALL Wildland Fire** and **Wildland Fire Use** incidents reported via the ICS-209 form on any land management unit in the State of New Mexico, the following information must be inserted in **Block 31** each daily the ICS-209 is submitted.

- 1- Each **Fuel Model** (Fire Behavior Fuel Model) that fire burned through. Use Reference Table (A) below.
- 2- Corresponding **Acres*** burned per Fuel Model.
- 3- Corresponding **Fuel Load*** for each fuel model
- 4- Corresponding **Intensity*** of burn for each fuel model (i.e. Light, Moderate, Heavy)

* If feasible, the acreage, fuel load, and intensity reported should be blackened acreage.

EXAMPLE 1: At the time the ICS-209 is submitted, the total perimeter acres being reported in Block 15 is 1,200. The difference in the acreage since the last submission of the ICS-209 is 200. If, of the 200 acres, the specific blackened acreage IS NOT known, then the entry in Block 31 would be: (where **PA** stands for "perimeter acres")

- | | | |
|--|-----------|---------------------|
| 1. Fuel Model 2, PA=150, Fuel Load=6.0, Intensity=High | Or | FM-2, PA150, 6.0, H |
| 2. Fuel Model 11, PA=50, Fuel Load=8.0, Intensity=Mod | Or | FM-11, PA50, 8.0, M |

EXAMPLE 2: At the time the ICS-209 is submitted, the total perimeter acres being reported in Block 15 is 1,200. The difference in the acreage since the last submission of the ICS-209 is 200. If, of the 200 acres, the specific blackened acreage IS known (i.e. 140 acres blackened in this case), then the entry in Block 32 or 44 would be: (where **BA** stands for "blackened acres")

- | | | |
|---|-----------|---------------------|
| 1. Fuel Model 2, BA=90, Fuel Load=6.0, Intensity=High | Or | FM-2, BL90, 6.0, H |
| 2. Fuel Model 11, BA=50, Fuel Load=8.0, Intensity=Mod | Or | FM-11, BL50, 8.0, M |

ARIZONA

For **ALL Wildland Fire** and **Wildland Fire Use** incidents reported via the ICS-209 form on any land management unit in the State of Arizona, the following information must be inserted in **Block 31** each daily the ICS-209 is submitted.

- 1- Predominant **National Fire Danger Rating System (NFDRS)** fuel model that the fire burned through. Use Reference Table (B) below. If feasible, the acreage reported should be blackened acreage.

EXAMPLE 1: At the time the ICS-209 is submitted, the total perimeter acres being reported in Block 15 is 1,200. The difference in the acreage since the last submission of the ICS-209 is 200. If of the 200 acres, the specific blackened acreage IS NOT known, then the entry in Block 31 would be: (where **PA** stands for “perimeter acres”)

1. Predominant Fuel Model B, Acres=PA200 **Or** FM-B, PA200

EXAMPLE 2: At the time the ICS-209 is submitted, the total perimeter acres being reported in Block 15 is 1,200. The difference in the acreage since the last submission of the ICS-209 is 200. If of the 200 acres, the specific blackened acreage IS known (i.e. 140 acres blackened in this case), then the entry in Block 31 would be: (where **BA** stands for “blackened acres”)

1. Predominant Fuel Model B, BL=140 **Or** FM-B, BL140

REFERENCE TABLES

(A) FIRE BEHAVIOR REFERENCE TABLE

FUEL MODEL		FUEL LOAD*	INTENSITY
Grass			
1	Short Grass (1-ft)	.74	L, M, H
2	Timber w/grass understory	4.0	L, M, H
3	Tall Grass (2.5 ft)	3.0	L, M, H
Brush			
4	Chaparral (6 ft)	13	L, M, H
5	Brush (2 ft)	3.5	L, M, H
6	Brush, dormant, hardwood slash	6.0	L, M, H
7	Southern Rough	4.9	L, M, H
Timber			
8	Closed timber litter	5.0	L, M, H
9	Hardwood Litter	3.5	L, M, H
10	Timber (litter and understory)	12.0	L, M, H
Slash			
11	Light	11.5	L, M, H
12	Medium	34.6	L, M, H
13	Heavy	58.1	L, M, H

*Total fuel load, dead and live <3-inches, in tons/acre. Use this number only as an average for estimating tons/acre.

(B) NATIONAL FIRE DANGER RATING SYSTEM (NFDRS)**FUEL MODEL**

GRASS	
A	Western Annuals
L	Western Perennials
S	Tundra
C	Open Pine with Grass
T	Sagebrush with Grass
N	Sawgrass
BRUSH	
B	Mature Brush (6 feet)
O	High Pocosin
F	Intermediate Brush
Q	Alaska Black Spruce
D	Southern Rough
TIMBER	
H	Short-needed pine (w/normal dead)
R	Hardwoods with leaves (Spring)
U	Western long-needed pine
P	Southern long-needed pine
E	Hardwoods without leaves (Fall)
G	Short-needed pine (w/heavy dead)
SLASH	
K	Light slash
J	Medium slash
I	Heavy slash